AMENDMENTS TO THE CLAIMS

1. (Previously Presented) A method of performing a one-pot organic reaction, which includes carbon monoxide as reactant without the use of an external CO gas source, comprising

preparing a reaction mixture containing a non-catalysing solid CO releasing compound which is a metal carbonyl of the general formula I,

$$M_x(CO)_y$$

wherein M is a metal, x is an integer, y is an integer, a non-metal substrate compound and a metal catalyst; wherein the metal carbonyl is not complexed with or bonded to the non-metal substrate compound prior to preparing said reaction mixture; and

exposing said reaction mixture to an energy source to release carbon monoxide from the CO releasing compound,

wherein carbon atoms of the released carbon monoxide form a bond with the non-metal substrate compound.

2-4. (cancelled)

5. (Previously Presented) The method according to claim 1 wherein the reaction mixture in addition to the non-metal substrate compound also contains an organic reactant.

6. (Previously Presented) The method according to claim 5, wherein the organic reactant is selected from the group consisting of amines, alcohols, thiols, hydrides, alkenes, alkynes, boric acids, boronic acids, carboxylate ions, malonate-type ions, enolate-type ions, azide ions, cyanide ions, halide ions, phosphines R_3P wherein R_3 is aryl, heteroaryl or alkyl, metal-organic compounds.

7. (Previously Presented) The method according to claim 1, wherein M is selected from Mo, W, Mn, Cr, and Co.

8. (Previously Presented) The method according to claim 1, wherein the metal carbonyl is selected from the group consisting of $Mo(CO)_6$, $W(CO)_6$, $Mn_2(CO)_{10}$, $Cr(CO)_6$, and $Co_2(CO)_8$ or derivatives thereof.

9. (Previously Presented) The method according to any claim 1, wherein the metal carbonyl is used in amounts of 0.1 to 10,000,000 molar equivalents.

10. (Cancelled)

11. (Previously Presented) The method according to claim 1, wherein the energy source raises the temperature of the reaction mixture to at least 100°C.

12. (Original) The method according to claim 1, wherein the metal catalyst is selected from the group consisting of Pd^0, Pd^{II}, Pd^{IV}, Pt^0, Pt^{II}, Pt^{IV}, Ni^0, Ni^I, Ni^{II}, Ni^{III}, Rh^0, Rh^I, Rh^{II}, Rh^{III}, Co^0, Co^I, Co^{II}, Co^{III}, Ir^0, Ir^I, Ir^{II} and Ir^{III} species.

13. (Previously Presented) The method according to claim 1, wherein the metal catalyst is present in molar equivalents of at most 0.9.

14. (Previously Presented) The method according to claim 1, wherein the non-metal substrate compound is covalently bound to a polymer.

15-17. (Cancelled)

18. (Previously Presented) The method according to claim 1, wherein the energy source is selected from the group consisting of

thermal energy, sonic energy, ultraviolet irradiation, microwave energy, and radiofrequency.

19. (Cancelled)

20. (Original) The method according to claim 7, wherein M is Mo or Cr.

21. (Original) The method according to claim 20, wherein M is Mo.

22. (Original) The method according to claim 8, wherein the metal carbonyl is $Mo(CO)_6$, or $Cr(CO)_6$.

23. (Original) The method according to claim 22, wherein the metal carbonyl is $Mo(CO)_6$.

24. (Original) The method according to claim 9, wherein the metal carbonyl is used in amounts of 0.1 to 1000 molar equivalents.

25. (Original) The method according to claim 24, wherein the metal carbonyl is used in amounts of suitably 0.20 to 100 molar equivalents.

26. (Original) The method according to claim 25, wherein the metal carbonyl is used in amounts of 0.25 to 5 molar equivalents.

27. (Original) The method according to claim 26, wherein the metal carbonyl is used in amounts of 0.3 to 0.6 molar equivalents.

28-30. (Cancelled)

31. (Original) The method according to claim 11, wherein the energy source raises the temperature of the reaction to at least 130°C.

32. (Original) The method according to claim 31, wherein the energy source raises the temperature of the reaction to at least 150°C.

33. (Original) The method according to claim 13 wherein the metal catalyst is present in molar equivalents of at most 0.5.

34. (Previously Presented) The method according to claim 33, wherein the metal catalyst is present in molar equivalents of 0.5-0.02.

35. (Original) The method according to claim 18, wherein the energy source is preferably thermal energy or microwave energy.

36. (Original) The method according to claim 35, wherein the energy source is microwave energy.

37. (Previously Presented) A method of preparing chemical libraries which comprises performing the one-pot organic reaction of claim 1.

38. (Previously Presented) The method according to claim 37, wherein the energy source is selected from the group consisting of thermal energy, sonic energy, ultraviolet irradiation, microwave energy, and radiofrequency.

39. (Previously Presented) The method according to claim 38, wherein the energy source is preferably thermal energy or microwave energy.

40. (Previously Presented) The method according to claim 39, wherein the energy source is microwave energy.

41. (Currently Amended) A kit for performing the one-pot organic reaction method of claim 1, comprising a non-catalysing solid CO releasing compound which is a carbonyl of the general formula I,

$$M_x(CO)_y$$

wherein M is a metal, x is an integer, y is an integer**; and a metal catalyst**.